

Abstract of the Disclosure

A method to locate a fault from one end of a section of a power line utilizing measurements of current, voltage and angles between the phases at a first end of said section. Symmetrical components of currents are calculated for the current and voltage measurement at the first end. A value of impedance is calculated for an extra link between the terminals with the impedance for the positive sequence. A compensation is determined for the shunt capacitance. The zero-sequence current is determined from the healthy line of a section of parallel power lines. A distance to a fault is calculated for the parallel line section. The distance to the fault from the first end is calculated. The fault is located utilizing the calculated distances.